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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/752,233

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Chul-Woo Kim

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02/28/2006

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EXAMINER

KITOV, ZEEV

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/752,233	Applicant(s) KIM, CHUL-WOO	
	Examiner Zeev Kitov	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005 and 05 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 - 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner acknowledges a submission of the amendment and arguments filed on August 5, 2005 and December 5, 2005. Claim 1 is deleted; Claims 2 – 22 are added. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A reason for that is in a following limitation: "a current transformer having a variable load applied thereto to produce said current transformer circuit output; and said variable load is varied in accordance with the power cutoff device effecting the interruption of power flow and institution of the test circuit".

The meaning of the underlined text is not clear from the claim language and is not supported by the Specification. It is not clear how the variable load can effect the interruption of power flow and institution of the test circuit. For purpose of examination patentable weight is not given to the underlined part of the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 – 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bodkin (US 4,979,070). Regarding Claim 2, Bodkin discloses following elements including: power conduction paths having a power cutoff device (25 in Fig. 1) for interrupting flow in at least one of the power conduction paths, a test current feed device (62, 61, 63 in Fig. 2) for feeding a test current in at least one of the power conduction paths; a zero sequence current transformer (3 in Fig. 2) connected to the power conduction paths, wherein the current transformer circuit output (connected to GFCI module 2 in Fig. 2) is indicative of a current imbalance in the paths; an abnormal current detector circuit (2 in Fig. 2) inherently effecting comparison of the current transformer circuit output, and providing an abnormality detection output (to circuit breaker 25 in Fig. 2) indicating an abnormality in response to the comparison being positive fore an abnormality (col. 6, line 54 – col.7, line 68). It further discloses a controller for controlling the power cutoff device to effect interruption of power flow (2 in Fig. 2). It further the controller instituting both the power cutoff when the ground leakage in either power supply line is detected and automatically restoring the power supply through the power

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supply lines to the load when the ground leakage is ceasing (col.8, line 1 – col. 9, line 42).

Regarding Claims 3, 11 and 17, Bodkin discloses the power cutoff device interrupting both pathways (25 in Fig. 1) and test current feed device feeding the test current in both power conduction paths (lines 115 and 116 in Fig. 5).

Regarding Claims 4 and 18, Bodkin discloses the test current feed device including impedances interposed in both power conduction paths (114 and 117 in Fig. 5).

Regarding Claims 5, 7, 8, 12, 13, 15, 16, 19, 21 and 22, Bodkin discloses the power cutoff device including relay contacts (21 and 22 in Fig. 5) interposed in both power conduction paths and bypassed by the impedances (117 and 113 in Fig. 5) to permit the test current flow.

Regarding Claims 6, 14 and 20, Bodkin discloses the impedance being serially connected resistances and capacitances (71, 69, 66, 67, 68 in Fig. 3 and 117, 114, 110 in Fig. 5).

Regarding Claim 9, Bodkin discloses the current detector periodically effecting updating of the abnormality detection output such that the output ceases indicating the abnormality when the results of comparison becomes negative after being positive (col. 1, lines 29 – 61, col. 8, line 1 – col. 9, line 42).

Regarding Claim 10, Bodkin discloses the current transformer having both coils inherently connected to the load; this load is variable since a connection is conditioned on the status of the circuit interrupter (25, 21 and 22 in Fig. 2).

Response to Arguments

Most of the Arguments are moot in view of new grounds of rejection. However, the Applicant's request for non-finality of the next Office Action should be addressed.

According to MPEP 706.07(a) [R-3], Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). In current case the Office action is properly made final because the new ground of rejection was necessitated by amendment of the application by applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose current telephone number is (571) 272 - 2052. The examiner can normally be reached on 8:00 – 4:30. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272 – 2800, Ext. 36. The fax phone number for organization where this application or proceedings is assigned is (571) 273-8300 for all communications.

Z.K.
2/6/2006



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